

Таким образом дополнительно можно получить 17,05 млн у.е. при передаче данных земель в сельское хозяйство.

Заключение. Предлагаемая методика эколого-экономической оценки земель лесного фонда может быть использована для межотраслевого сравнения эффективности землепользования и обоснования перераспределения земельных ресурсов между отраслями сельского и лесного хозяйства.

Основные направления дальнейшего совершенствования предлагаемой методики для ее эффективного внедрения в экономический механизм обеспечения устойчивого природопользования – это применение типологического подхода в оценке ресурсов побочного пользования; уточнение объема получаемого сырьевого экономического эффекта от промежуточного пользования; определение экономического эффекта, который обеспечивается выполнением лесами различных функций.

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ЭКОНОМИЧЕСКАЯ, ЭКОЛОГИЧЕСКАЯ И СОЦИАЛЬНАЯ ОЦЕНКИ ВЛИЯНИЯ НЕУСТОЙЧИВЫХ МЕТОДОВ ВЕДЕНИЯ ЛЕСНОГО ХОЗЯЙСТВА И НЕЗАКОННЫХ РУБОК НА МЕСТНОЕ НАСЕЛЕНИЕ В УКРАИНЕ

(ECONOMIC, ENVIRONMENTAL AND SOCIAL EVALUATION OF UNSUSTAINABLE FORESTRY PRACTICES AND ILLEGAL LOGGING INFLUENCES ON LOCAL POPULATION IN UKRAINE)

Ukraine is involved in international forest policy dialogue, particularly Intergovernmental and Pan-European processes of the forest sector development on the principles of sustainability, but implementation of international agreements needs to be more practically oriented. Evaluation of the main causes of unsustainable forestry practices and illegal logging is a precondition for development of the efficient measures towards its combating.

In the framework of the ENPI FLEG program the empiric research of illegal logging and unsustainable forestry social and economic impacts in Ukraine has been done by method of expert survey - standardized 'face-to-face' interview. According to the official data on illegal logging the studies been made in four administrative regions of Polissya and Carpathians (highly forested ecozones of Ukraine) with the highest volume of illegal logging: Rivne, Lviv, Ivano-Frankivsk, and Zakarpatya. The field studies have been made in four administrative districts (pilot territories) within mentioned regions: Starosambirskyy District in Lviv Region; Kosiv District in Ivano-Frankivsk Region; Khust District in Zakarpatya Region; and Bererzne Region in Rivne Region. In general 200 persons have been interviewed in each region in the following categories (50 people from each category in each region): business representatives; forestry specialists; local community representatives. It's mean in general 600 respondents interviewed.

Criterion for selection of experts: sufficient level of competence in the problems of study, which has been evaluated by following parameters: a) work on positions requiring special training and managing positions in state and private structures (forestry specialists and business representatives); b) residence and work on the territories of local communities (district capitals, towns, villages) in the regions where the research has been made; social activity.

According to a survey of local communities, forestry professionals and business representatives the main factor that belongs to unsustainable forest management and adversely affects the economic and social development of forest areas are precisely the illegal harvesting (so says 54% of respondents). 52 % of respondents consider that very important protection of the forest as a natural object is important for representatives of forest dependent communities as a source of wood for commercial uses, a place of gathering mushrooms, berries, medicinal plants, a recreation place.

According to respondents a significant threats to forest conditions are: corruptive schemes of timber harvesting (50 %) and misuse of forest resources in

the operations of the businesses (47,5 % of respondents). An important threat to the forest condition is illegal logging by local residents (54%) and poor environmental culture of people (50 %), unsustainable activities of forest enterprises (49%), poor protection of the forests (47 %), transfer of forest lands for lease by so-called temporary forest users (40 %), imperfect legislative base (39,5 %), ineffective and unsustainable exploitation of forest resources because of decision of local authorities (34,5 %).

Based on the interviews from small businesses, we can conclude that in long-term perspective illegal harvesting has the negative influence on timber and woodworking enterprises because of the following:

- significant volumes of illegal forest logging lead to decreasing the volumes of high quality timber which small enterprises might buy legally (e.g. on auctions) for making their business (because in illegal logging usually the best timber is selected);

- functioning of illegal loggers which also get timber for their needs illegally, i.e. use the timber from illegal logging, or using the illegal timber by legal woodworking enterprises (which is cheap), creates the conditions for *unfair competition* in realization of production (since the enterprises using the timber from illegal cuts can sell their products for lower prices);

- situation described above may also lead to *closure of a number of legally operating small enterprises* (they will not be able to deal under the unfair competition). As a result, only medium and big enterprises will remain on the market, what will have a negative reflection on regional and national economy.

The most important factor which can ensure the transparent access of small business to timber and other forest resources is lower pressure of government and political structures on business, lower number of permission procedures and documents needed to obtain permits for use of forest resources, perfect regulations, which will not make obstacles to legal use of forest resources, and also better information support for representatives of small business, governmental institutions and permitting authorities in explanation of mechanisms for transparent access to timber and other forest resources.

Representatives of all groups of experts evaluate as critical current state of forests in the regions they represent and applied methods of forest management. It is interesting that this position is also self-criticizing; as they realize that position and activities of groups they represent (especially experts from community and business) brings the threats for the current state of forests.

At the same time, while analyzing the threats for the forests from various factors, all groups of experts tend to 'shift the responsibility' on objective situation in the country and put the factors which are beyond their direct control (shadow economy, corruption, insufficient level of social care and poor economic situation of local population etc.) on the first places as main threats.

In evaluation of activity effectiveness in forest protection by forestry enterprises, mass media, environmental non-governmental organizations, local government, state environmental inspection, local communities, law enforcement an impact of professional ethics is mentioned as essential. At the same time it is interesting to point that in negative evaluation of work of environmental non-governmental organizations the thoughts of community representatives and forestry specialists coincided, and the experts from among businessmen less negatively evaluate their work. We think that it may be considered on one hand as an evidence of insufficient level of communication between these structures and local communities, and on another hand (if consider the responses of businessmen experts open enough) – as indirect confirmation of activity of non-governmental organizations which causes conflict of interests with all violators of forestry and environmental legislation.

Because current laws do not contain the description of procedure for so called “long-term form of temporary lease of forest lots” (for the term up to 49 years), this form of land and forest use is an reason for social conflicts as result of limitation of community access to forest resources. Based on study of legislation and regulations in temporary usage of forest lots (i.e. their leasing for commercial purpose), and also the results of interviewing the respondents, following typical problems have been defined:

- *legislative and regulative documents adopted on local level do not contain the criteria for selection of certain lots into category of possible objects for long-term rent by entrepreneurs;*

- *insufficiently transparent procedures for allocation of forest lots into temporary usage. Usually there is a list of documents to be prepared by entrepreneurs pretending on long-term rent of forest lot (approval by primary forest user, regional forestry and hunting department, in some cases – business plan) which will be analyzed by a workgroup before submission for approval by Head of Regional State Administration. However there are no exact criteria which should be used by this workgroup;*

- *in certain cases temporary users limit the rights of residents and communities to access the forests, ignore their interests, but in practice it is quite difficult to hold them accountable for violation of agreement on temporary usage of the lot.*

The following principles are recommended to be taken into consideration while taking the decisions on allocation of forest lots in temporary usage by entrepreneurs:

- *transparency of decision making process with consideration of opinion of all interested parties and mutual respect of conditions of an agreement;*

- *consideration and comparison of alternative usage of land and forests, taking into account related expenses and benefits not only from the tenant's point of view, but also from point of public interests, i.e. providing valuable re-*

sources for community on the basis of identified legislative criteria for evaluation;

- recognition of priority after the options which are most close to traditional in this area.

The right of local residents "on special usage of forest resources" is being implemented through the set of legislative documents. Access to forest resources of local importance (secondary forest materials, indirect forest usage) is more simple in comparison with forest resources of state importance (wood, rosin) and only requires the presence of forest card issued by permanent forest user (state forestry enterprise) on the basis of submitted application for usage of forest resources.

The IUFRO's recent study, "*Embracing complexity: Meeting the Challenges of International Forest Governance*" finds that, too often, local needs are ignored; agreements fail to address the most fundamental challenge to global forest management – the fact that deforestation usually is caused by economic pressures imposed from outside the forests. The illegal logging causes a number of socio-economic consequences: reduction of the level of economic and social wellbeing of forest dependent communities); social conflicts over resource distribution inequality against the principles of sustainable development (social injustice on the allocation of resources within generations, inequity of resources distribution between the generations); loss to the state and local budgets, which is reflected in social programs (education, science, culture, security); increase of the expenditures for the plantation, protection and restoration of forests; reducing feedback between state investments in the forest cultivation and collection of revenue from harvest (considerable profits are going to those who are harvesting illegally).

The main environmental implications of illegal harvesting are: loss of biodiversity; climate change; intensified erosion processes; disturbances for the hydrological regime; occurrence of natural disasters due to unfavorable of harvesting technology; decrease the stability of ecosystems; trashing of cutting areas, mountain rivers and roads by wood residues; reduce the protective functions of forests.

Deficiencies in the forest control system, which caused by broad scale illegal logging: breaking of law and harvesting operations rules; corruption schemes; conflicts of different agencies interest lack of progress in implementing the concept of sustainable forest management.

Thus the respondents consider as the underlying causes of illegal logging such causes: low level of social standards of population, high unemployment rate; functioning of illegal private sawmills, who are consumers of timber of with illegal origin, high profitability of illegal logging; insufficient measures to combat smuggling and corruption, presence of the shadow sector in the economy.

At the same time the studies of illegal logging in the main forest regions of Ukraine found such general tendencies:

- Gradual decreasing of the illegal logging (number of cases, cubic meters of wood illegally harvested, and estimated costs of damage to forest ecosystem) since mid of 1990th. The analysis of the dynamics of illegal logging during the last 15 years clearly shows that its highest level was observed since the last three years of 1990th until mid of 2000th. The number of cases and the volumes of illegal logging also increased in the studied regions in 2009 (up to two times) and then again decreased in 2010.

- The data on illegal logging collected from different sources give very different results. In particular the volume of illegal logging in the Ukrainian Carpathians according the estimations of different institutions are: a) State Forestry Committee of Ukraine – 0.01 million cubic meters, b) Swiss-Ukrainian Forestry Development Project “FORZA” – 1.0 -1.25 million cubic meters, World Bank – 0.25 -0.3 million cubic meters.

- According the evaluation of the forestry professionals the share of illegal harvesting is up to 20% (opinion of 59.5 % of the respondents);

- Most of the respondents who represent wood based business think that they don't have credible information about the scale of illegal logging in their location (“it's hard to give an answer” agreed 57% of the respondents).

- The most important factors which stimulate wood based business to use the wood of illegal origin are the simple way of receiving of wood and functioning of the shadow sector in the economy.

- For opinion of the forestry professional the most spread illegal cuttings in the forest of the Carpathians and Polissya eco-zones are the cuttings for satisfaction of own basic needs of living in rural location (fuel wood, and construction wood) and the cuttings oriented on income receiving from timber sale or further wood processing.

- For opinion of the same group of the experts illegal logging carried out by commercial structures without any permission is practically absent.

- The value of the damage from illegal logging (also by opinion of forestry experts) has a medium scale (opinion of 42.5 % of respondents).

As unsustainable forestry practices the following practices can be considered which have been noticed in the region of study: a) The cuttings which are done in a such way that they are worsening the ecological functions of forests and their productivity (clear cuttings that cover too big areas, illegal logging, cuttings which decrease the forest density as consequence of permanent selection of the best (most productive) trees, cuttings along the river-side and on the plots with the highly erosive soils, cuttings with the considerable soil damage during the skidding process, not satisfactory level of control of forest deceases, low attention to the forest biodiversity conservation in the process of cuttings planning and fulfillment; b) Unsatisfactory level of attention to the social needs

of the staff of the forestry organizations, c) Unsatisfactory level of attention to the interests of the local communities’.

International agreements, resolutions, conventions, declarations and Laws of Ukraine currently do not give desired result in ensuring the transparency and community participation in the processes of legal management of forest resources. This contributes to poor awareness of forestry-dependent communities with their own rights, absence of mutually fruitful cooperation between communities and forestry officers and in most cases – complete lack of involvement of local residents (communities) into decision making processes. Therefore, there is a need in development and implementation of effective measures in prevention of violations with issuance of permits for forestry usage, first of all through simplification of granting procedures, minimization of time spending for these procedures, availability of correct information on forest resources and elimination of bureaucratic obstacles in the forms of authorization centers.

Achieved results lead to conclusion that the most perspective approaches in solving the problems in use of forests are following:

- streamlining the legal procedures for access to forest resources, prevention of its violation in this sector, especially by elimination of corruption risks;
- improving the mechanism for raw wood auctioning considering the interests of small entrepreneurs (reduction of the lots sales volume, sale of real wood instead of "virtual" wood of unknown quality, improvement of information content and distribution about the auction procedures).
- combating the shadow economy which stimulated reproduction of corruption;
- increase of social capital of local communities and forest management enterprises and social responsibility of business structures, stimulation of their cooperation in the field of forest protection, forest restoration and sustainable management of forest resources, especially with implementation of European Union countries experiences.

The main measures that can decrease the level of illegal logging: reducing unemployment and increasing of rural communities wellbeing, increased penalties for illegal activities, strengthening of administrative and criminal liability and system of public control, forest certification, community participation in forest resource decision making.

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